

WHAT IS CLAIMED IS:

1. A system for polishing a substrate comprising (i) a liquid carrier, (ii) ammonium oxalate, (iii) a hydroxy coupling agent, and (iv) a polishing pad and/or an abrasive.
2. The polishing system of claim 1, wherein the liquid carrier is a nonaqueous solvent.
3. The polishing system of claim 1, wherein the liquid carrier is water.
4. The polishing system of claim 3, wherein no abrasive is present, and the polishing pad is a non-abrasive pad.
5. The polishing system of claim 3, wherein an abrasive is fixed on the polishing pad.
6. The polishing system of claim 3, wherein the polishing system comprises an abrasive suspended in the water.
7. The polishing system of claim 6, wherein the abrasive is a metal oxide.
8. The polishing system of claim 7, wherein the abrasive is silica.
9. The polishing system of claim 8, wherein the hydroxy coupling agent is ureidopropyltrimethoxysilane.
10. The polishing system of claim 9, further comprising a film-forming agent.
11. The polishing system of claim 10, wherein the film-forming agent is an organic heterocycle comprising at least one 5-6 member heterocyclic nitrogen-containing ring.
12. The polishing system of claim 11, wherein the film-forming agent is benzotriazole.

13. The polishing system of claim 3, wherein the hydroxy coupling agent is a silane-containing compound.

14. The polishing system of claim 13, wherein the hydroxy coupling agent is ureidopropyltrimethoxysilane.

15. The polishing system of claim 3, wherein the pH is about 9-11.

16. A method of polishing a substrate comprising contacting at least a portion of a substrate with the polishing system of claim 1 and polishing the portion of the substrate therewith.

17. The method of claim 16, wherein the substrate comprises copper.

18. The method of claim 17, wherein the substrate further comprises tantalum.

19. The method of claim 18, wherein the Cu:Ta removal rate is at least about 1:1.

20. The method of claim 17, wherein the substrate further comprises tetraethoxysilane.

21. The method of claim 20, wherein the Cu:TEOS removal rate is at least about 1:2.

22. A method of polishing a substrate comprising contacting at least a portion of a substrate with the polishing system of claim 12 and polishing the portion of the substrate therewith.

23. The method of claim 22, wherein the substrate comprises copper.

24. The method of claim 23, wherein the substrate further comprises tantalum.

25. The method of claim 24, wherein the Cu:Ta removal rate is at least about 1:1.

26. The method of claim 23, wherein the substrate further comprises tetraethoxysilane.

27. The method of claim 26, wherein the Cu:TEOS removal rate is at least about 1:2.

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